

Fluorescence Spectroscopy Investigation of the Enzymatic Mechanism of Phytochelatin Synthase, an Enzyme Able to Cleave and Form Peptide Bonds

This DFG-funded project aims to elucidate the molecular mechanism of Phytochelatin synthase (PCS) by characterizing the energetics and the kinetics of its catalytic cycle. For this purpose, we will employ fluorescently-labeled and chemically-modified GSH analogues. By combining experimental (Fluorescence, UV-Vis and NMR spectroscopy) with theoretical (molecular dynamics, electrostatics, quantum chemistry) techniques, we will investigate the function of PCS and connect the structural information with physiological data.

Stimulating collaborations at the University of Bayreuth with Prof. Stephan Clemens (Plant Physiology), Prof. Rainer Schobert (Organic Chemistry) and Prof. Matthias Ullmann (Theoretical Biophysics) will enrich the scientific environment and favor the fulfillment of the project.

The candidate should have a good background in Biophysics and/or Biochemistry. A CV with study records and the name of one **academic** willing to send a recommendation letter are requested.

For further information please contact:

Dr. Elisa Bombarda
e-mail: Elisa.Bombarda@uni-bayreuth.de
tel. +49 (0)921 / 55 43 64
<http://www.bisb.uni-bayreuth.de/bombarda>

Von:

Dr. Elisa Bombarda
Elisa.Bombarda@uni-bayreuth.de
University of Bayreuth, Germany
Bayreuth, Germany

Ansprechpartner: Elisa.Bombarda@uni-bayreuth.de

*<http://jobs.uni-hd.de>
